

2013

SEAT BELT

AND

MOTORCYCLE HELMET

SURVEY



Prepared For:

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PRODUCED BY:



In 2012, Mississippi's traffic fatality rate was **19.5 FATALITIES PER 100,000 MISSISSIPPIANS.** Mississippi's rate was nearly twice the national average of 10.69.

INTRODUCTION

The National Highway Traffic Safety Administration (NHTSA) confirmed there were 33,561 motor vehicle traffic fatalities in the United States in 2012. This estimate represents a 3.3% increase from the previous year's fatality count of 32,479. This staggering estimate is a constant reminder that fatal crashes have claimed many lives over the years and continue to claim on average about 92 lives each and every day in the United States. In terms of a rate estimate, NHTSA calculates a national rate of 1.14 fatalities per 100 million vehicle miles of travel in 2012.¹

Vehicle safety is a major component in all aspects of vehicle and road designs. However, it is the behavior of the driver and passengers with respect to belt use that ultimately determines the probability of survival in most vehicle crashes. A great number of fatalities may have been avoided if proper vehicle restraints had been used at the time of the crashes. NHTSA estimates that from 2008 to 2012, safety belts saved 63,000 lives of vehicle occupants age 5 and older – with 12,174 of those estimated lives saved in 2012 alone.²

NHTSA reports that Mississippi's 2012 traffic fatality rate at 19.5 fatalities per 100,000 population. Mississippi's rate was almost twice the national average of 10.69. This disturbing fatality rate continues to be realized by the 582 lives lost in Mississippi in 2012.³ Although significant increases have been observed in seat belt usage since the primary law was passed, the loss of life due to automobile crashes in Mississippi is still staggering. Perhaps one contributing factor for this fatality rate in Mississippi could be attributed to the state

continuing to lag behind several other states in occupant protection practices and likewise, the belt use national average. Mississippi had an estimated 83.0% seat belt usage rate in 2012. The national average was 86%. In 2012, 19 states had a lower belt usage rate than Mississippi – from Arizona at an 82.2% belt use rate down to South Dakota at 66.5%. Over the past few years, Mississippi has climbed from near the bottom of the rankings to a more positive behavioral status in seat belt usage. However, it should be noted that fourteen of the 19 states below Mississippi's rate do not have a primary seat belt law.⁴



For the past 12 years, Mississippi has participated in a major effort conducted under the term "Click It or Ticket" (CIOT) during Memorial Day mobilizations. These efforts have been an attempt to increase seat belt awareness and use by implementing a number of phases.

In 2013, the first of these phases was an earned media phase including public service announcements, brochures and newspaper articles that were introduced to the Mississippi public. After two weeks of earned media, an extensive paid media campaign began (second phase). Lastly, a statewide law enforcement blitz (third phase) increased the intensity of seatbelt law enforcement throughout the state. All law enforcement agencies participated in this increased level of enforcement by using road blocks as well as saturated patrolling efforts.



In 2013, two observational seat belt surveys were conducted by the Social Science Research Center at Mississippi State University. One survey was conducted prior to media and law enforcement intervention. This pre-campaign survey was a subsample of the recently NHTSA-approved survey design that contains the official sample for the 2013 post-campaign survey cycle. This pre-CIOT survey consisted of 54 sites in eight counties. The 2013 follow-up, or post-campaign survey, used the full 173 site, 16 county survey sample. This is the first year the newly approved sample was utilized to provide the official seat belt estimate for Mississippi.



¹ NHTSA Traffic Safety Facts – 2012 Motor Vehicle Crashes: Overview; November 2013 (DOT HS 811 856).

² NHTSA Traffic Safety Facts - Lives Saved in 2012 by Restraint Use and Minimum Drinking Age Laws; November 2013 (DOT HS 811 851).

³ NHTSA State Traffic Facts Mississippi (<http://www-nrd.nhtsa.dot.gov>).

⁴ NHTSA Traffic Safety Facts – Seat Belt Use in 2011 – Use Rates in the States and Territories – August 2012 (DOT HS 811 651).

The seat belt and motorcycle survey for Mississippi uses a multi-stage area probability approach. In the first stage, an appropriate number of sampling units are randomly selected. The primary sampling unit for the Mississippi survey is the county. The counties with the least amount of crash-related occupant fatalities, approximately the bottom 15%, are excluded from the sampling process. The survey was conducted in 16 Mississippi Counties which comprised 35% of the State's crash-related occupant fatalities between 2005 and 2009.

Special thanks to Preusser Research Group (PRG) for their assistance in the development of this methodology and continuing technical expertise.



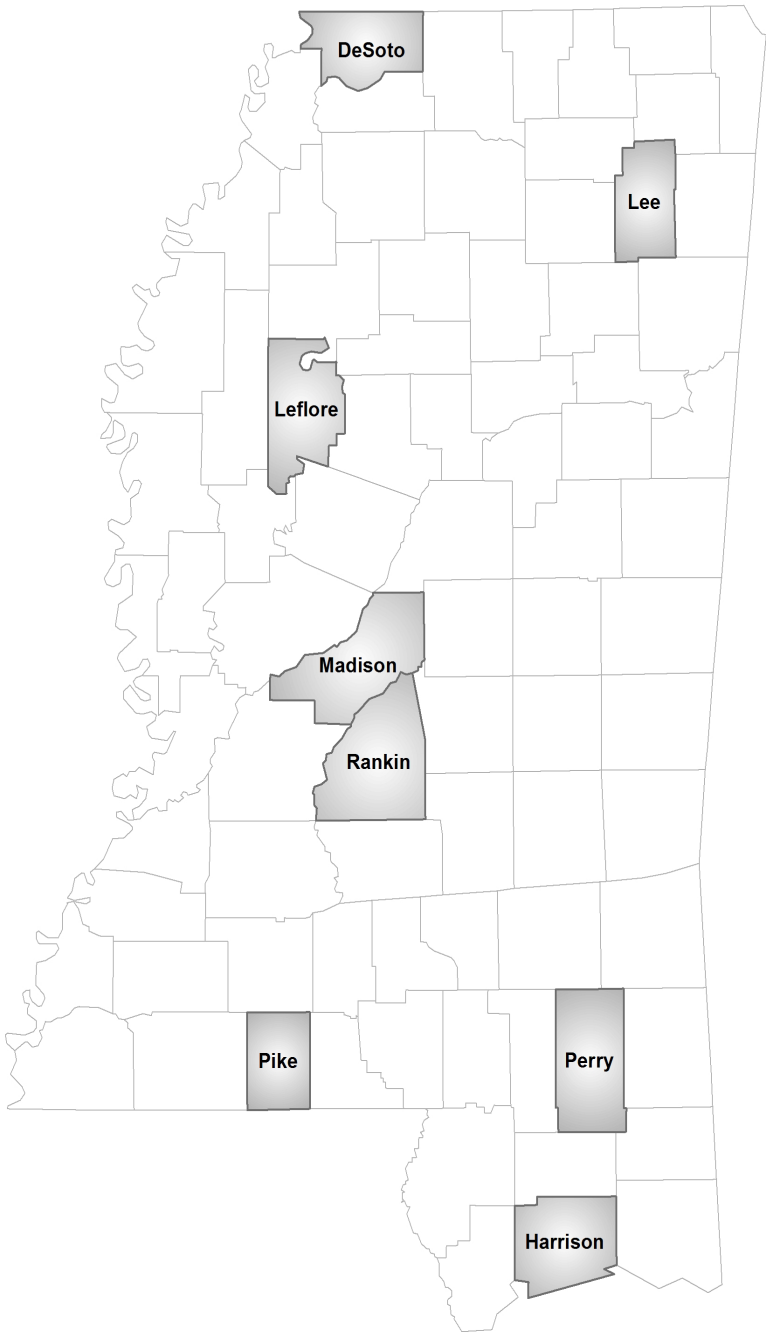
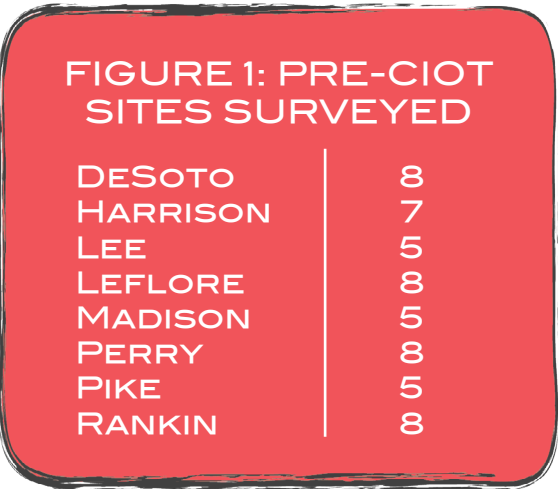
Further details on the sampling methodology of the survey can be found in the document *"PROPOSAL FOR MISSISSIPPI OBSERVATIONAL SURVEYS OF SAFETY BELT AND MOTORCYCLE HELMET USE"* prepared by William A. Leaf (PRG), David R. Parrish (SSRC) and Mark G. Soloman (PRG). This methodology was approved by NHTSA in 2012 and can be obtained from the Social Science Research Center at Mississippi State University, Box 5287 Mississippi State, MS 39762, or by contacting Mr. David Parrish at (662) 325-8116 or david.parrish@ssrc.msstate.edu.

SUMMARY OF SAMPLING METHODOLOGY

- A. Five counties were selected as certainty counties because of having crash-related occupant fatalities (and likewise population) much larger than other Mississippi Counties. These counties also comprise nearly 21% of the state's crash-related occupant fatalities. The certainty counties were DeSoto, Harrison, Hinds, Jackson and Rankin.
- B. Twenty-nine counties, whose combined crash-related occupant fatalities accounted for about 15% of the state's population, were eliminated from the sampling frame.
- C. Sampling was done without replacement. In addition to the five certainty counties, 11 other counties were chosen, thus the sample consists of 16 counties.
- D. The sample includes 173 45-minute observation periods at 173 pseudo-randomly chosen road segment locations. Each road segment within a county was randomly chosen with probability of being chosen proportionate to the DVMT of the road segment. The five certainty counties were allotted 15 observation periods, while the remaining 11 counties were allotted either 10 or 8 observation periods each.
- E. The qualifying route segments comprising the sampling population are identified from the Mississippi Department of Transportation (MDOT) Roadway Characteristics File.
- F. The route segments from each of the survey counties are stratified into the following five groupings using MDOT functional classification data: (1) Interstates and Other Expressways, (2) Other Principal Arterials, (3) Minor Arterials, (4) Collectors and (5) Local Roads.
- G. For a given county, segments were pseudo-randomly chosen from each of the five strata.
- H. For each certainty county, the 15 sites were grouped by proximity into two clusters of seven and eight sites.
- I. For each of the other 11 counties, clusters of 5 or 8 were selected depending on the presence of or requirement to survey all road classifications (A minimum of 2 road segments per road classification was satisfied).
- J. For each cluster a day of the week was randomly chosen. All days of the week were eligible for selection.
- K. Once a site was assigned a day of the week, observation times between 7 a.m. and 6 p.m. were randomly chosen in 1 hour and 15 minute increments.
- L. Direction of observation was randomly assigned for all 173 sites.
- M. Observers were instructed to observe from a site using the assigned direction for a period of 45 minutes.
- N. The sampling frame includes counting all passenger vehicles, sports utility vehicles, vans and pickup trucks. Other vehicles, such as large buses, larger trucks and farm equipment are excluded from observation.
- O. One observer is used at each observation site and the shoulder belt use/nonuse of all front seat, outboard occupants of qualifying vehicles is recorded on forms supplied by the SSRC.

SECTION ONE: PRE-CAMPAIGN OBSERVATIONAL SEAT BELT SURVEY RESULTS

Prior to any media or law enforcement efforts encouraging seat belt usage, a 2013 baseline or “Mini” survey was conducted. This survey was administered with intentions of establishing a seat belt usage rate before the CIOT campaign. Observations from 54 sites in eight counties made up the baseline survey. The 54-site sample was a subsample of the larger statewide survey, which is detailed in Section Two of this report.



The data from this baseline survey was collected between April 2 and April 27, 2013. The counties in the “Mini” survey were hand-picked from the statewide sample with the intention of including a mixture of different geographical regions where both rural and urban counties are represented.

TABLE 1: BASELINE SEAT BELT USAGE RATES BY TYPE OF VEHICLE
BASELINE SURVEY OF 54 SITES IN 8 COUNTIES

Table 1 shows the baseline belt use figures for driver and outside front seat passenger by type of vehicle observed. The overall usage rate for the baseline survey was 82.8%. Sports Utility Vehicle and Van occupants topped the percent belted ranks with virtually identical estimates of belt use near 88%. Passenger car occupants exhibited a higher than average 84.9% belt rate, and pickup truck occupants continue to exhibit the lowest belt use rates in Mississippi at 73.5%. The 73.5% belted rate for trucks lowers the total baseline average significantly. Seat belt compliance for pickup truck occupants is a considerable problem area for Mississippi, which if addressed could result in a much higher total Mississippi belt use rate.

TYPE OF VEHICLE	OCCUPANTS OBSERVED	PERCENT BELTED
Passenger Car	2,488	84.9%
Pickup Truck	1,480	73.5%
SUV	1,350	87.8%
Van	382	87.7%
TOTAL	5,700	82.8%

TABLE 2: BASELINE SEAT BELT USAGE RATES BY COUNTY
BASELINE SURVEY OF 54 SITES IN 8 COUNTIES

A breakdown of seat belt usage rates by county in the pre-CIOT survey uncovers six of the eight counties above 80% belt use, with Madison being the top-ranked showing a 91.5% belt use estimate. Leflore County was the only surveyed county that fell short of the 70% estimated belt usage mark by a very small fraction at 69.8%.

The baseline survey produced an estimated seat belt rate for the state that is slightly over 2% higher than the last “Mini” survey conducted in 2011 (80.5%). Note the 2013 sample for the “Mini” survey uses different counties and road segments than in years past.

COUNTY	OCCUPANTS OBSERVED	PERCENT BELTED
DeSoto	797	86.6%
Harrison	849	86.0%
Lee	858	77.6%
Leflore	592	69.8%
Madison	774	91.5%
Perry	519	82.5%
Pike	438	83.1%
Rankin	873	82.6%
TOTAL	5,700	82.8%

SECTION TWO:

POST-CAMPAIGN
OBSERVATIONAL SEAT BELT
RESULTS

In 2013, NHTSA mandated each state to perform a statewide observational seat belt usage surveys according to the new criteria set forth by the federal agency’s final rule in 2011. The new uniform criteria gained intense criticism from surveying professionals throughout the country, but the integrity and intent of the new criteria was defended and declared by NHTSA as the new measurement “yardstick” for all states to adhere. Following the guidelines, a new, compliant survey design was developed by Mississippi and tested in 2012 as the baseline survey (pre-CIOT). It produced an overall baseline estimate in 2012 of 74.3%. This newly developed and approved survey design was also used as the official estimator of seat belt usage for the state in 2013.



The 2013 post-campaign survey was conducted after an intense seat belt media and enforcement campaign known as “Click It or Ticket” during the month of May. The intentions of this survey were to quantitatively gauge how effective the campaign was received by the motoring public and to generate an official 2013 estimate of seat belt usage for the state. Figure 2 shows the counties that frame the 2013 seat belt survey. There were 173 road segments observed in 16 counties.

The overall result for the 2013 Mississippi Seat Belt Survey is a 74.38% occupant seat belt usage rate with a standard error of 1.388%. The lower limit of the 95% confidence interval is 71.66%, and the upper limit is 77.10%.

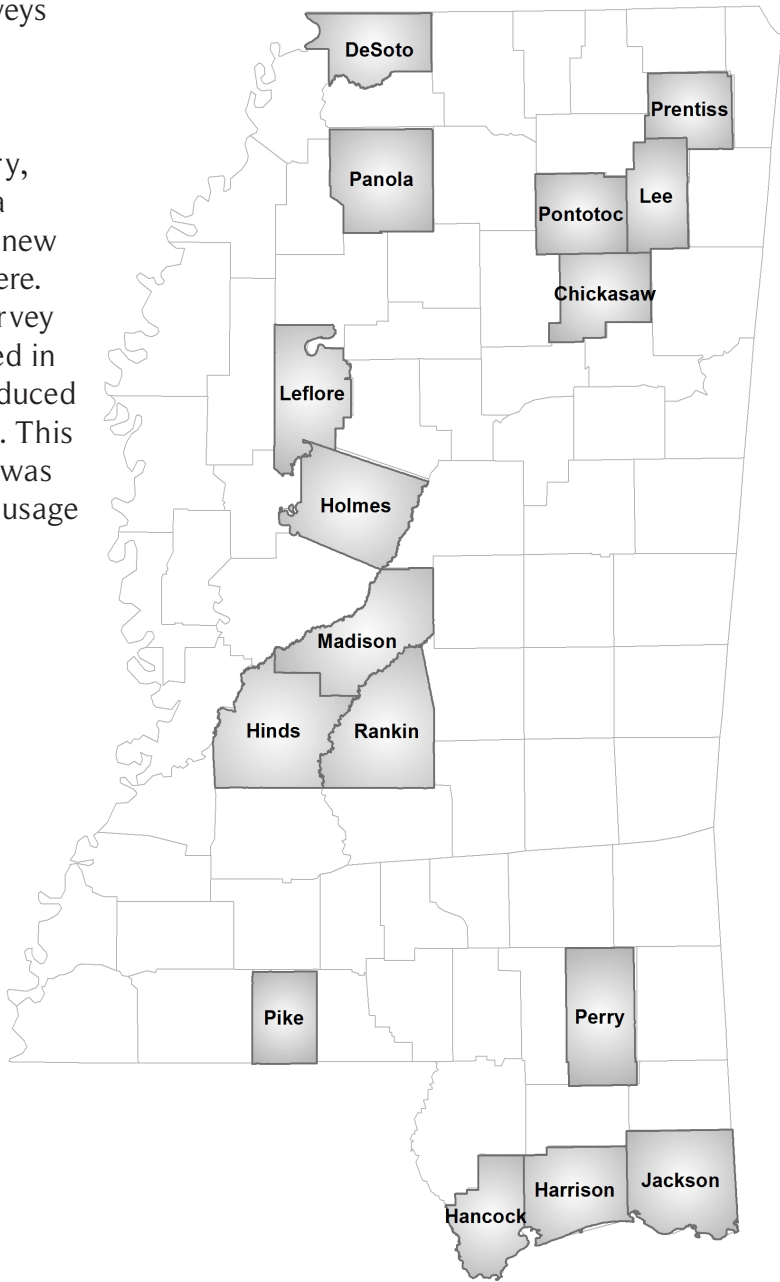


TABLE 3: SEAT BELT USAGE RATES BY ROAD CLASS
FULL SURVEY OF 173 SITES IN 16 COUNTIES

As confirmed by many previous surveys, there is still a clearly defined trend of higher seat belt usage rates on higher traffic count roads. Table 3 shows “interstates and other expressways” leading the road class categories with an 85.3% belt usage rate in 2013. The next level of road category, “other principal arterials,” followed with an 81.8% belt use rate. The next two functional classification divisions (minor arterials, and collectors) had belt rates from the mid to low seventy percent range. And lastly, the “local roads” classification, which is new in this year’s survey, returned an expectedly low 67.6% estimated belt use rate.

ROAD CLASS	OCCUPANTS OBSERVED	BELT USAGE RATE
Interstates & Other Expressways	5,692	85.3%
Other Principal Arterials	5,654	81.8%
Minor Arterials	4,008	76.8%
Collectors	2,079	71.5%
Local Roads	1,237	67.6%

TABLE 4: SEAT BELT USAGE RATES BY VEHICLE TYPE
FULL SURVEY OF 173 SITES IN 16 COUNTIES

Table 4 illustrates a breakdown of belt usage rates in four vehicle categories. SUVs and vans showed virtually identical belt use estimates at 80.2% and 80.1% respectively. The survey also revealed that about 3 out of every 4 (76.4%) occupants in passenger cars use seat belt, and as expected, the vehicle type with the least number of seat belt compliant occupants is pickup trucks at 68.3%.

VEHICLE	OCCUPANTS OBSERVED	BELT USAGE RATE
Passenger Car/Wagon	8,112	76.4%
Pickup	4,912	68.3%
SUV	4,233	80.2%
Van	1,413	80.1%

The following series of tables (Tables 5-10) provides breakdowns of seat belt usage rates by type of vehicle, by county, by driver/passenger and by gender. Unsure observations are omitted in these breakdowns, and the extent of this data narrowing produces more specific results but is of practical use only if the number of observations is significant enough to draw conclusions. Usually the minimum number of total observations per category should be around 30 before conclusions can be drawn. Many of the figures in this series of tables may not meet this requirement. However, this in-depth breakdown can be used as a loose guide to specific problem areas that may deserve attention.

TABLE 5: SEAT BELT USAGE RATES BY COUNTY – ALL VEHICLES
FULL SURVEY OF 173 SITES IN 16 COUNTIES
ALL TYPES OF VEHICLES BY DRIVER/PASSENGER AND GENDER (N =18,651)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	55.9%	63.3%	58.6%	48.3%	58.3%	51.8%	57.2%
n =	972	638	1,610	166	206	372	1,982
Harrison	91.3%	95.1%	92.8%	88.9%	97.7%	93.5%	93.0%
n =	769	488	1,257	117	215	332	1,589
Hinds	74.2%	75.1%	76.0%	71.6%	91.9%	83.0%	76.7%
n =	837	615	1,452	104	139	243	1,695
Jackson	95.4%	96.4%	95.9%	95.9%	96.8%	96.3%	95.7%
n =	763	390	1,153	73	115	188	1,341
Rankin	70.8%	84.0%	74.1%	75.1%	73.5%	77.2%	75.0%
n =	854	697	1,551	130	259	389	1,940
Chickasaw	63.6%	76.6%	69.3%	50.4%	71.5%	67.9%	68.6%
n =	367	282	649	54	90	144	793
Hancock	78.4%	82.2%	80.9%	81.9%	65.1%	76.1%	79.7%
n =	472	232	704	78	160	238	942
Holmes	71.4%	76.4%	73.5%	52.5%	71.3%	65.6%	71.7%
n =	494	270	764	91	134	225	989
Lee	66.2%	79.5%	71.3%	63.4%	84.7%	74.1%	71.7%
n =	764	508	1,272	95	129	224	1,496
Leflore	57.4%	60.3%	59.9%	57.6%	86.4%	65.8%	60.3%
n =	287	190	477	39	21	60	537
Madison	69.0%	88.7%	80.2%	81.4%	99.0%	90.8%	81.1%
n =	574	406	980	77	135	212	1,192
Panola	56.2%	57.6%	57.0%	36.3%	52.3%	45.8%	54.3%
n =	595	465	1,060	139	170	309	1,369
Perry	77.1%	94.5%	84.4%	73.3%	99.2%	89.8%	85.3%
n =	316	190	506	44	87	131	637
Pike	79.7%	88.0%	84.7%	71.2%	87.8%	79.2%	84.0%
n =	385	320	705	53	67	120	825
Pontotoc	63.1%	77.1%	69.5%	64.9%	81.4%	74.8%	70.8%
n =	344	265	609	65	94	159	768
Prentiss	59.3%	66.7%	61.5%	51.6%	57.4%	52.4%	60.2%
n =	287	184	471	42	43	85	556
TOTAL	70.8%	78.9%	74.6%	66.8%	80.4%	74.6%	74.4%
N =	9,080	6,140	15,220	1,367	2,064	3,431	18,651

ENCOURAGING OBSERVATIONS:

- Counties above 90% usage rate for all occupants are the coastal counties of Harrison and Jackson.
- Female passengers in the surveyed counties of Harrison, Jackson, Madison and Perry are exemplary belt users with nearly a 100% usage rate.
- Of the 2,064 female passengers observed, 8 out of 10 are buckled. This is the only overall survey group (female passengers) that crossed the 80% usage threshold in 2013

ROOM FOR IMPROVEMENT:

- Five counties illustrated disappointing overall belt use estimates below 70%.
- DeSoto and Panola bottomed the list of belt use estimates with 57.2% and 54.3% overall usage, respectively.
- Of the 139 observed male passengers in Panola County, about one-third were buckled.
- Of the male passengers observed in DeSoto and Chickasaw, only about half were buckled.

TABLE 6: SEAT BELT USAGE RATES BY COUNTY – CARS+SUVS+VANS
FULL SURVEY OF 173 SITES IN 16 COUNTIES
CARS + SUVs + VANS BY DRIVER/PASSENGER AND GENDER (N=12,260)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	58.1%	63.7%	60.6%	50.8%	57.2%	54.4%	58.9%
n =	617	606	1,223	116	169	285	1,508
Harrison	90.8%	96.9%	93.4%	88.3%	97.3%	92.9%	93.3%
n =	488	440	928	80	175	255	1,183
Hinds	78.0%	75.0%	77.7%	87.9%	94.4%	89.9%	79.2%
n =	506	594	1,100	72	113	185	1,285
Jackson	95.3%	96.2%	95.7%	97.7%	98.1%	97.9%	95.8%
n =	473	343	816	33	90	123	939
Rankin	74.4%	85.7%	77.1%	88.6%	73.8%	81.6%	77.9%
n =	519	653	1,172	88	199	287	1,459
Chickasaw	70.2%	79.8%	76.1%	69.5%	72.0%	74.3%	75.4%
n =	189	268	457	28	74	102	559
Hancock	79.0%	82.1%	81.2%	93.2%	64.8%	82.3%	79.8%
n =	293	218	511	59	132	191	702
Holmes	77.7%	76.1%	76.9%	53.3%	65.2%	59.4%	73.9%
n =	311	252	563	58	117	175	738
Lee	75.0%	81.8%	79.2%	71.7%	87.5%	83.6%	79.8%
n =	424	466	890	62	108	170	1,060
Leflore	53.6%	61.9%	59.4%	75.7%	89.6%	78.6%	61.3%
n =	144	169	313	21	17	38	351
Madison	82.2%	89.0%	86.5%	92.9%	98.9%	96.8%	88.2%
n =	391	387	778	53	122	175	953
Panola	56.8%	58.1%	57.6%	32.6%	50.9%	44.5%	54.5%
n =	370	437	807	97	145	242	1,049
Perry	91.4%	94.0%	92.0%	97.5%	99.1%	98.6%	93.4%
n =	148	175	323	19	74	93	416
Pike	78.9%	89.6%	86.1%	72.6%	97.0%	82.3%	85.8%
n =	221	297	518	31	55	86	604
Pontotoc	57.3%	78.0%	72.4%	77.6%	84.0%	80.2%	74.1%
n =	167	248	415	37	73	110	525
Prentiss	58.0%	68.0%	64.1%	68.2%	57.6%	59.3%	63.3%
n =	167	180	347	29	35	64	411
TOTAL	73.9%	79.8%	77.5%	76.7%	81.3%	79.2%	77.5%
N =	5,428	5,733	11,161	883	1,698	2,581	13,742

ENCOURAGING OBSERVATIONS:

- The belt use estimate without the inclusion of pickup trucks is 3 percentage points higher than the overall (77.5% compared to 74.4%).
- Counties above 90% usage rate for all occupants are Harrison, Jackson and Perry.
- Female passenger in Hinds County showed a 94.4% belt use rate, which contrasts the other groupings for Hinds.

ROOM FOR IMPROVEMENT:

- DeSoto, Leflore, Panola and Prentiss have discouraging overall belt use estimates.
- The female passengers category in Hancock County (64.8% usage) was substantially lower than the other categories in Hancock.
- Passengers in Holmes County seem to behave quite differently from the drivers observed in the county.

TABLE 7: SEAT BELT USAGE RATES BY COUNTY – PASSENGER CARS

FULL SURVEY OF 173 SITES IN 16 COUNTIES
PASSENGER CARS BY DRIVER/PASSENGER AND GENDER (N =8,099)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	56.9%	61.2%	58.4%	41.5%	43.5%	43.6%	55.4%
n =	398	358	756	80	95	175	931
Harrison	91.0%	97.2%	93.1%	85.0%	94.6%	89.5%	92.4%
n =	324	251	575	46	90	136	711
Hinds	74.2%	75.1%	76.7%	85.8%	92.6%	88.2%	77.8%
n =	308	375	683	40	67	107	790
Jackson	94.8%	94.8%	94.7%	100.0%	95.9%	96.7%	94.9%
n =	281	181	462	10	36	46	508
Rankin	70.3%	87.9%	76.5%	84.1%	70.4%	72.1%	75.6%
n =	259	372	631	44	87	131	762
Chickasaw	63.8%	79.1%	73.3%	64.5%	74.1%	74.5%	72.9%
n =	111	178	289	17	40	57	346
Hancock	79.4%	82.2%	81.6%	96.8%	66.5%	80.0%	80.2%
n =	169	131	300	33	59	92	392
Holmes	74.9%	73.1%	73.9%	51.5%	65.5%	60.6%	70.9%
n =	199	159	358	35	74	109	467
Lee	75.0%	82.7%	80.9%	66.6%	81.2%	78.9%	80.6%
n =	245	293	538	34	56	90	628
Leflore	52.2%	59.5%	55.2%	86.1%	81.2%	81.3%	57.8%
n =	69	86	155	10	8	18	173
Madison	76.5%	84.0%	83.9%	91.2%	98.8%	95.8%	86.2%
n =	214	224	438	30	57	87	525
Panola	56.2%	58.5%	57.6%	24.4%	45.5%	38.7%	53.3%
n =	250	282	532	58	104	162	694
Perry	89.5%	91.3%	90.2%	100.0%	100.0%	100.0%	92.7%
n =	69	107	176	11	40	51	227
Pike	76.0%	89.8%	85.3%	78.1%	95.4%	76.7%	84.4%
n =	138	184	322	20	30	50	372
Pontotoc	55.8%	75.6%	70.2%	78.6%	82.8%	81.6%	72.5%
n =	102	165	267	21	40	61	328
Prentiss	65.1%	70.7%	68.2%	79.6%	75.0%	77.6%	68.8%
n =	99	112	211	16	18	34	245
TOTAL	72.2%	79.1%	76.5%	76.5%	79.9%	78.0%	76.4%
N =	3,235	3,458	6,693	505	901	1,406	8,099

ENCOURAGING OBSERVATIONS

- With 8,099 observations, overall belt use in passenger cars is 76.4%.
- Harrison, Jackson and Perry counties claim the top spots in the passenger car category with over 90% belt use estimates.
- All 51 occupants in passenger cars observed in Perry County were seat belt compliant.
- Madison County’s 87 observed passengers illustrated a very high belt use rate (95.8%).

ROOM FOR IMPROVEMENT:

- None of the totals in any category received over an 80% usage rate.
- Extremely low belt use rates were observed in DeSoto (55.4%), Leflore (57.8%) and Panola (53.3%).
- Only one of every four males passengers in Panola County were observed buckled.

TABLE 8: SEAT BELT USAGE RATES BY COUNTY – PICKUP TRUCKS

FULL SURVEY OF 173 SITES IN 16 COUNTIES
PICKUP TRUCKS BY DRIVER/PASSENGER AND GENDER (N =4,909)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	52.0%	58.3%	51.9%	46.6%	48.8%	47.7%	51.5%
n =	355	32	387	50	37	87	474
Harrison	93.4%	86.2%	91.0%	94.3%	100.0%	97.4%	92.1%
n =	281	48	329	37	40	77	406
Hinds	75.2%	75.8%	75.8%	51.3%	88.7%	68.7%	75.0%
n =	331	21	352	32	26	58	410
Jackson	95.5%	96.4%	96.1%	95.5%	96.4%	95.9%	95.6%
n =	290	47	337	40	25	65	402
Rankin	68.9%	75.1%	69.0%	73.3%	92.3%	79.5%	68.7%
n =	335	44	379	42	60	102	481
Chickasaw	57.3%	66.4%	53.9%	30.5%	54.6%	35.7%	52.7%
n =	178	14	192	26	16	42	234
Hancock	77.2%	97.4%	78.6%	59.6%	62.3%	66.0%	77.8%
n =	179	14	193	19	28	47	240
Holmes	65.0%	84.3%	65.9%	63.4%	90.0%	72.9%	66.8%
n =	183	18	201	33	17	50	251
Lee	58.1%	59.3%	58.6%	54.9%	70.8%	54.7%	58.1%
n =	340	42	382	33	21	54	436
Leflore	58.7%	51.9%	58.6%	53.2%	59.5%	57.3%	56.8%
n =	143	21	164	18	4	22	186
Madison	68.1%	86.6%	67.5%	65.0%	100.0%	76.0%	66.5%
n =	183	19	202	24	13	37	239
Panola	56.7%	57.2%	56.1%	48.9%	62.9%	53.9%	55.3%
n =	225	28	253	42	25	67	320
Perry	69.2%	100.0%	73.2%	43.3%	100.0%	49.9%	71.7%
n =	168	15	183	25	13	38	221
Pike	79.5%	67.8%	77.4%	69.5%	83.5%	76.3%	75.2%
n =	164	23	187	22	12	34	221
Pontotoc	63.8%	74.3%	63.9%	52.3%	70.5%	63.9%	64.2%
n =	177	17	194	28	21	49	243
Prentiss	60.4%	0.0%	59.0%	33.4%	50.0%	35.6%	58.1%
n =	120	4	124	13	8	21	145
TOTAL	69.1%	71.2%	68.9%	58.3%	77.7%	64.8%	68.3%
N =	3,652	407	4,059	484	366	850	4,909

ENCOURAGING OBSERVATION:

- Harrison and Jackson Counties display two model pickup belt use rates for all occupants at 92.1% and 95.6% respectively.

ROOM FOR IMPROVEMENT:

- With 4,909 observations, overall belt use in pickup trucks is 68.3%.
- No surveyed county showed pickup belt rates above 80% (except Harrison and Jackson which were above 90%).
- Eleven of the 16 surveyed counties are below 70% belt usage and six of those counties are below 60%.
- DeSoto and Chicksaw bottom the list with belt use in the low 50% range.
- DeSoto County has extremely poor pickup truck belts use across the board with the worst cases being male drivers at 46.6%.

TABLE 9: SEAT BELT USAGE RATES BY COUNTY – SUVs

FULL SURVEY OF 173 SITES IN 16 COUNTIES
SUVs BY DRIVER/PASSENGER AND GENDER (N =4,230)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	61.2%	68.4%	64.8%	69.5%	57.6%	63.3%	64.6%
n =	161	196	357	26	51	77	434
Harrison	92.7%	97.2%	94.2%	97.3%	100.0%	98.9%	94.9%
n =	111	127	238	21	51	72	310
Hinds	83.2%	63.4%	79.7%	81.9%	83.4%	86.3%	79.7%
n =	134	170	304	23	29	52	356
Jackson	97.6%	98.3%	98.2%	100.0%	100.0%	100.0%	98.2%
n =	137	128	265	16	39	55	320
Rankin	82.3%	71.1%	76.5%	92.0%	93.8%	93.7%	77.1%
n =	193	237	430	31	84	115	545
Chickasaw	80.2%	81.3%	79.6%	78.6%	49.3%	65.4%	78.1%
n =	48	75	123	7	28	35	158
Hancock	90.8%	92.2%	93.3%	84.1%	84.7%	85.2%	91.5%
n =	99	77	176	18	63	81	257
Holmes	81.4%	77.5%	79.2%	64.5%	78.2%	54.7%	75.5%
n =	78	77	155	19	25	44	199
Lee	73.8%	84.8%	79.3%	95.3%	85.5%	89.8%	80.7%
n =	117	132	249	21	32	53	302
Leflore	63.7%	72.7%	69.7%	76.4%	100.0%	88.7%	71.5%
n =	58	73	131	10	7	17	148
Madison	87.2%	90.4%	89.4%	89.4%	98.4%	96.4%	90.6%
n =	136	132	268	11	44	55	323
Panola	52.4%	51.9%	53.1%	32.1%	67.9%	49.9%	52.1%
n =	91	119	210	31	30	61	271
Perry	87.3%	96.5%	92.3%	94.2%	97.5%	97.0%	92.3%
n =	65	64	129	7	31	38	167
Pike	83.2%	86.6%	85.3%	78.0%	100.0%	87.0%	85.4%
n =	72	94	166	9	19	28	194
Pontotoc	70.9%	82.3%	76.2%	65.0%	93.9%	71.2%	75.9%
n =	46	63	109	9	24	33	142
Prentiss	70.6%	82.6%	70.2%	94.9%	77.5%	88.2%	71.2%
n =	39	47	86	9	9	18	104
TOTAL	79.0%	80.8%	80.3%	81.0%	85.8%	82.6%	80.2%
N =	1,585	1,811	3,396	268	566	834	4,230

ENCOURAGING OBSERVATIONS:

- Overall belt use for SUVs is 80.2% with 4,230 observations.
- Five of the 16 counties have overall belt use rates for SUVs over 90%, and one of those counties (Jackson) show over 95% belt usage.
- All 55 passengers observed in Jackson County were belted.
- Female passengers have the highest belt usage rate in SUVs at 85.8%.

ROOM FOR IMPROVEMENT:

- Only slightly over half of the 271 occupants observed in Panola County were buckled.
- DeSoto and Panola are the only counties below 70% belt usage.
- There is a large discrepancy between the belted status of all drivers and all passengers in Rankin County (76.5% to 93.7%).

TABLE 10: SEAT BELT USAGE RATES BY COUNTY – VANS

FULL SURVEY OF 173 SITES IN 16 COUNTIES
VANS BY DRIVER/PASSENGER AND GENDER (N =1,413)

COUNTY	DRIVERS			PASSENGERS			OCCUPANTS
	Male	Female	All	Male	Female	All	All
DeSoto	65.4%	65.6%	66.7%	61.3%	84.5%	74.5%	68.6%
n =	58	52	110	10	23	33	143
Harrison	88.4%	98.8%	94.0%	91.6%	100.0%	97.1%	95.0%
n =	53	62	115	13	34	47	162
Hinds	77.7%	96.4%	81.1%	100.0%	100.0%	100.0%	82.3%
n =	64	49	113	9	17	26	139
Jackson	91.0%	100.0%	97.4%	79.8%	100.0%	89.1%	96.6%
n =	55	34	89	7	15	22	111
Rankin	84.2%	73.8%	71.2%	53.9%	100.0%	90.9%	71.6%
n =	67	44	111	13	28	41	152
Chickasaw	79.9%	89.6%	84.1%	100.0%	57.2%	71.5%	80.9%
n =	30	15	45	4	6	10	55
Hancock	86.3%	94.4%	93.5%	100.0%	100.0%	100.0%	95.4%
n =	25	10	35	8	10	18	53
Holmes	88.6%	95.7%	90.0%	66.7%	81.7%	75.7%	88.0%
n =	34	16	50	4	18	22	72
Lee	71.4%	85.9%	77.5%	44.3%	95.3%	74.5%	75.9%
n =	62	41	103	7	20	27	130
Leflore	38.0%	92.0%	58.5%	100.0%	82.0%	82.0%	58.1%
n =	17	10	27	1	2	3	30
Madison	87.1%	90.6%	88.9%	95.2%	100.0%	98.3%	91.8%
n =	41	31	72	12	21	33	105
Panola	78.3%	65.2%	70.9%	65.2%	68.0%	65.5%	70.7%
n =	29	36	65	8	11	19	84
Perry	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
n =	14	4	18	1	3	4	22
Pike	77.6%	94.1%	87.1%	100.0%	87.0%	87.0%	88.3%
n =	11	19	30	2	6	8	38
Pontotoc	55.3%	90.5%	72.8%	100.0%	97.5%	99.1%	75.6%
n =	19	20	39	7	9	16	55
Prentiss	27.5%	59.3%	41.9%	50.0%	23.6%	31.1%	39.4%
n =	29	21	50	4	8	12	62
TOTAL	74.9%	87.6%	80.0%	82.8%	86.4%	84.2%	80.1%
N =	608	464	1,072	110	231	341	1,413

ENCOURAGING OBSERVATIONS:

- Overall belt use for vans is 80.1% with 1,413 observations.
- Although many percentages in this breakdown are based on less than 30 observations and determined not to be representative, the overall usage rate for van occupants is over 90% for five of the 16 counties.
- All 22 van occupants observed in Perry County were belted.

ROOM FOR IMPROVEMENT:

- Based on 62 observations, Prentiss County shows the worst van belt use rate, by far, at 39.4%.
- DeSoto, Leflore and Prentiss were the only counties below the 70% usage rate.

FIGURE 3A: MALE SEAT BELT USAGE RATES BY VEHICLE TYPE & RACE
FULL SURVEY OF 173 SITES IN 16 COUNTIES

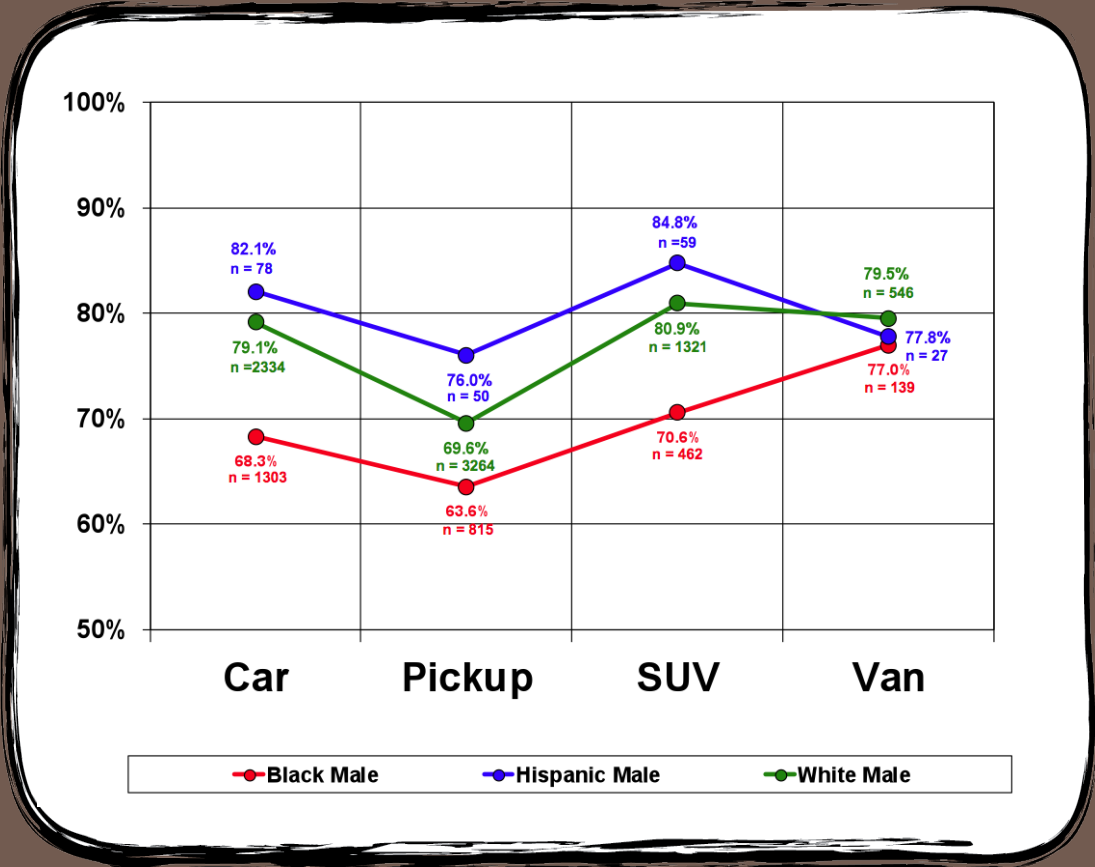
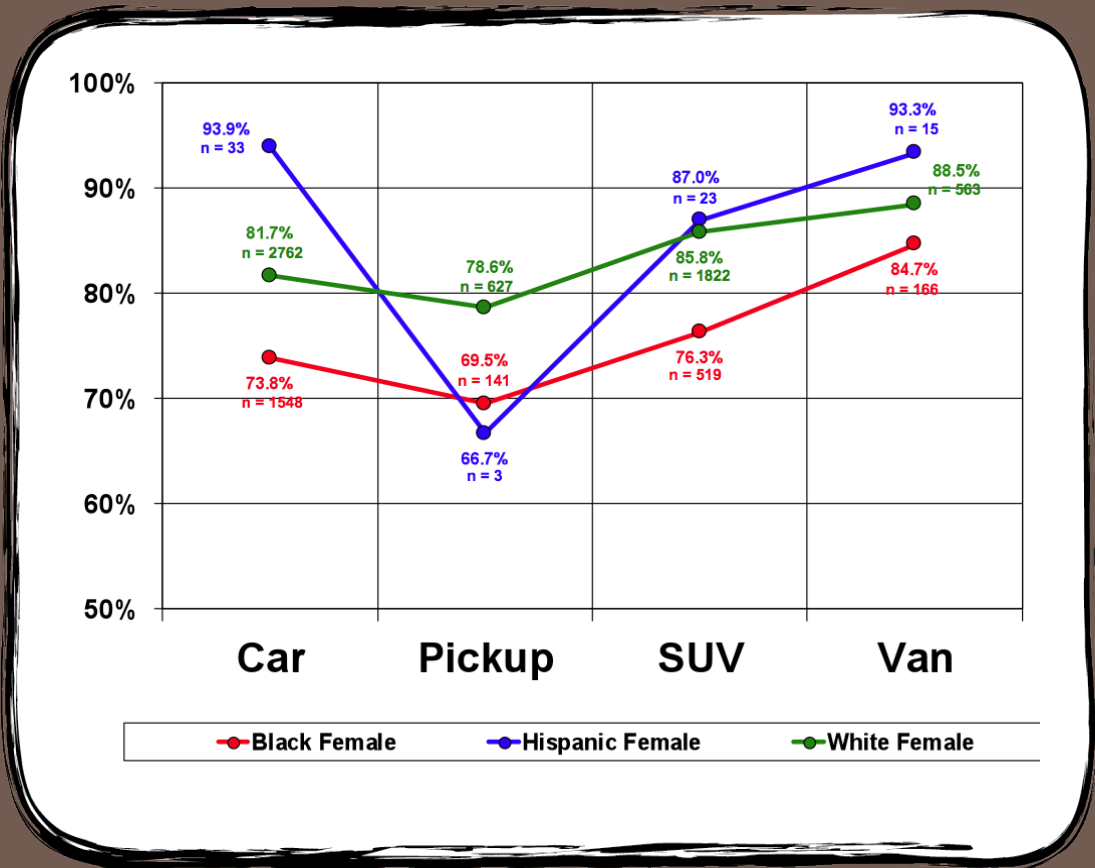


FIGURE 3B: FEMALE SEAT BELT USAGE RATES BY VEHICLE TYPE & RACE
FULL SURVEY OF 173 SITES IN 16 COUNTIES



CAR
>82%

The first column in both graphs shows Hispanic occupants at the top of the chart with 82.1% of the 78 males observed buckling up. Likewise, of the 33 Hispanic females observed, 93.9% were buckled.

PICKUP
63.6%

The second column in each graph shows the lowest value in these breakdowns. Black males in pickups were buckled at an estimated rate of only 63.6%.

SUV
>70%

The third column illustrates SUV belt use range from 70.6% (black males) to 85.8% (white females). The Hispanic figures are not representative of that motoring population.

VAN
88.5%

White females in vans have the highest rate of belt use behavior in the state with 88.5% of the 563 observed buckling up. Again, the percentage of belted Hispanic van occupants is not considered representative due to low sample size.

Figure 3A and Figure 3B are graphic illustrations of how well the observed population buckled up by gender, race and type of vehicle. Figure 3A shows males, and Figure 3B shows females. Notice how the black and white trends are almost parallel in both the male and female figures. Hispanic belt use rate is a bit more volatile, which is most likely attributable to low sample sizes. One can see that vehicle occupants of both genders who are black tend to lag behind white population when it comes to buckling up in Mississippi.

Also, a comparison between graphs shows females using vehicle restraints far better than males. In general, the conclusion can be drawn that white females are the most likely group to be using a seat belt restraint in Mississippi. The belt usage rates for Hispanic women in all types of vehicles are based on very low observational sample sizes and therefore cannot be considered accurate.



MISSISSIPPI

MISSISSIPPI
IT'S THE LAW!



FIGURE 4: SEAT BELT USAGE RATES BY RACE & GENDER
FULL SURVEY OF 168 SITES IN 16 COUNTIES

Figure 4 represents an analysis of belt use broken down only by race and gender. This chart reveals that males within each race category lag about 7 to 10 percentage points behind females when it comes to buckling up. White females are almost 9 percentage points above black females and 15 percentage points above black males. Hispanic belt use rate estimates have also been included in Figure 4, and although the sample sizes are greater than 30, drawing statewide conclusions about the belt use behavior of Hispanics is not conclusive.

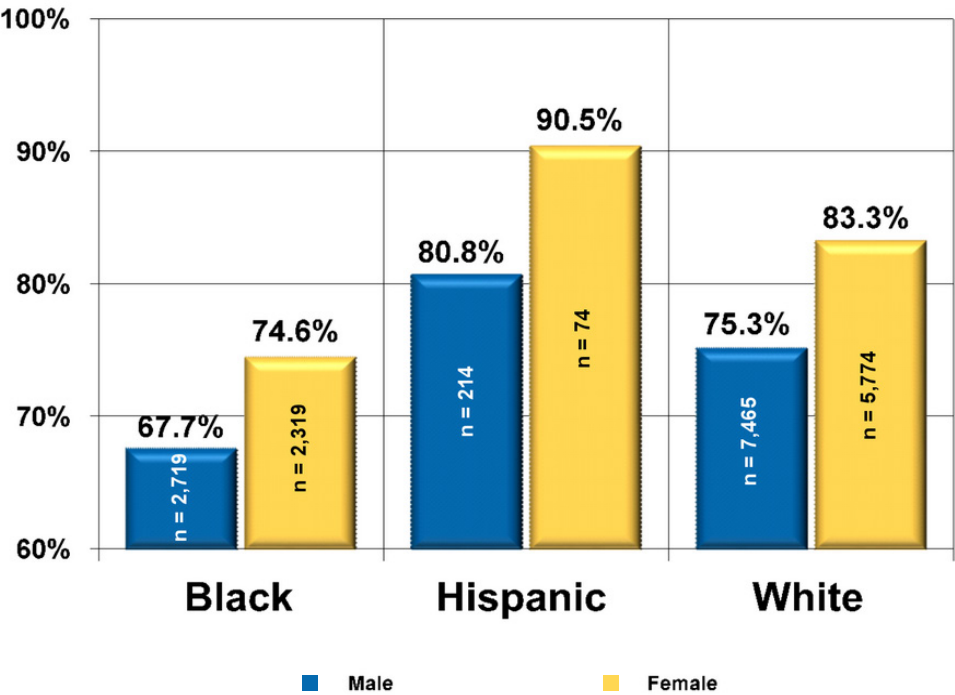


FIGURE 5: MISSISSIPPI SEAT BELT USAGE RATES
WITH 95% CONFIDENCE INTERVAL UPPER AND LOWER LIMITS (1997 – 2013)

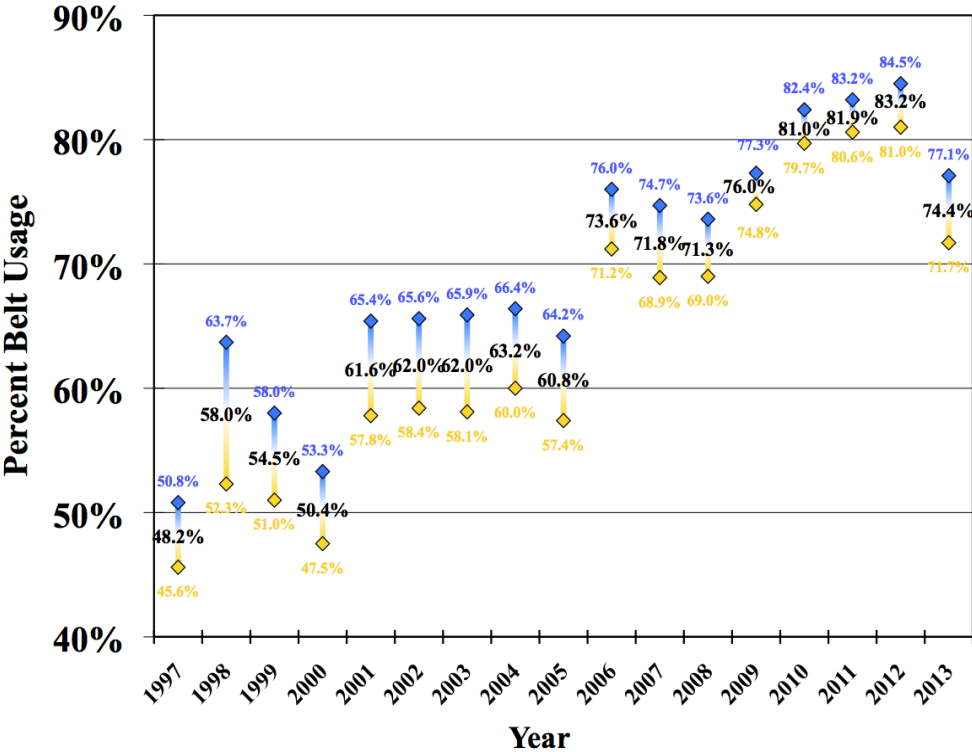


Figure 5 shows a definite upward trend of seat belt usage rates since 1997. Each year displays an official belt use rate and 95% confidence interval upper and lower limits. Since the primary seat belt law went into effect in 2006, the trend stayed relatively flat for about three years as can be seen by the overlapping of confidence intervals from 2006 to 2009. The rate took a significant positive jump in 2010 to 81.0% and small positive incremental increases of less than 1% the next couple of years. In 2013, the introduction of a new set of sampling criteria may have contributed to a significant decrease in the belt use estimation for the state. The statewide seat belt usage estimate fell from 83.2% to 74.4% from 2012 to 2013.

FIGURE 6: NATIONAL SEAT BELT USE RATES IN 2012
SOURCE: 2012 NHTSA TRAFFIC SAFETY FACTS: CRASH/STATS DOT HS 811809 – JULY 2012

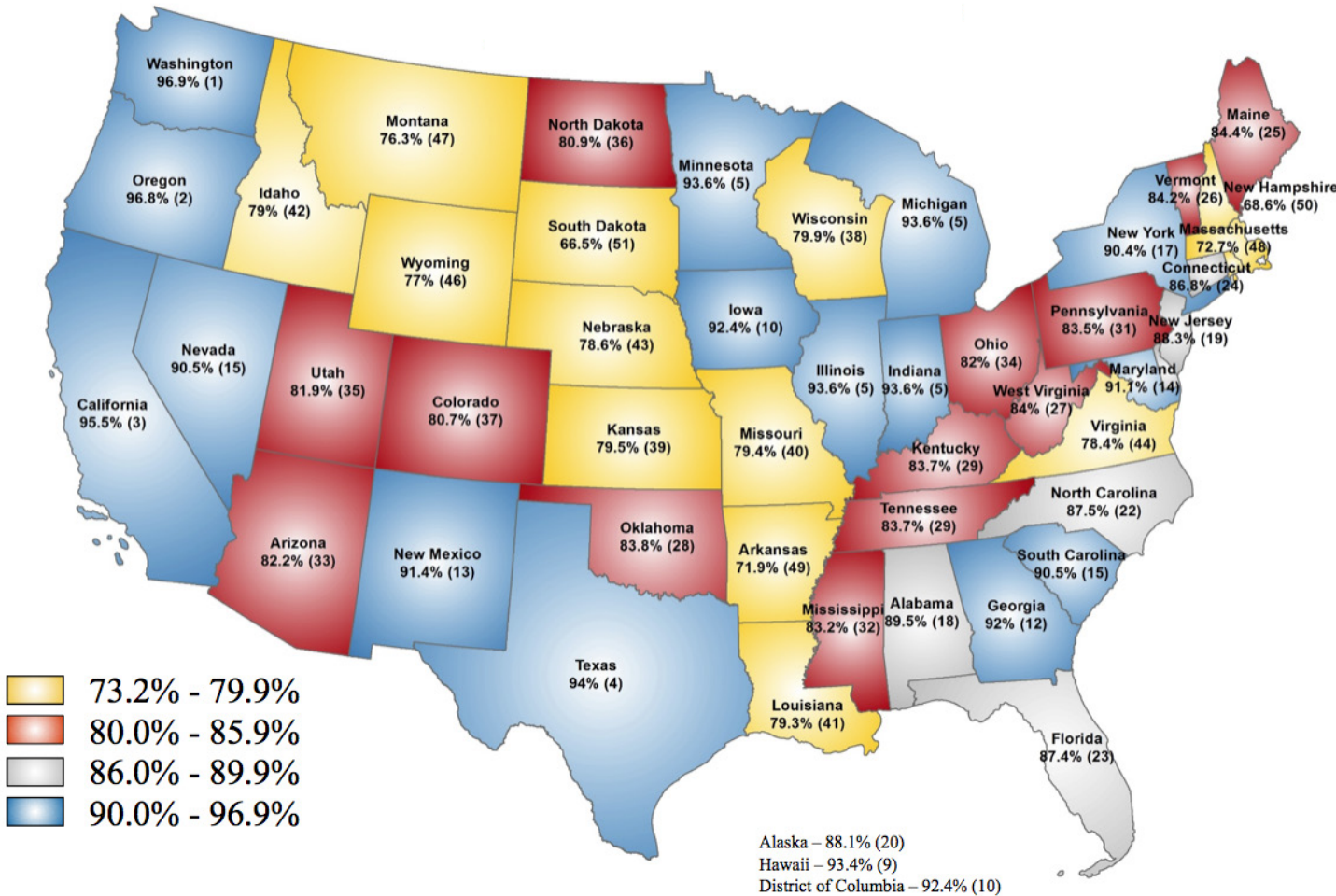


Figure 6 allows viewers to gain a geographic sense of Mississippi's peer states with regard to belt use rates in 2012. Mississippi is currently in the second tier of states with an overall belt use average over 80%. As can be seen, several states are trailing Mississippi in belt use. States colored in gold or light red had seat belt usage rates below the 2012 national average of 86%. States in the light gray or blue categories had belt use rates above the national average. The highest belt use states in the nation (above 90%) are the blue colored states. A ranking of the states in terms of belt use has also been included on the map in parentheses after their respective belt use rates (e.g. Mississippi ranked 32nd in the nation in belt use in 2012).

SECTION THREE: BELT USE BEFORE AND AFTER INTERVENTION

Three surveys, based on the new criteria set forth by NHTSA, have been conducted over the past two years. The baseline or pre-CIOT survey in 2012 was a “dry run” of the entire 173 sites in 16 counties. In 2013, a “Mini” survey was conducted with a 54 site subsample, and the first official statewide survey under the new criteria was conducted post-CIOT in 2013. The results of these surveys can be seen in Table 11.

TABLE 11: BASELINE VERSUS FOLLOW-UP COUNTY COMPARISONS
SEAT BELT USAGE RATES BY COUNTY * MINI 2013 RESULTS ARE UNWEIGHTED

COUNTY	PERCENT BELTED			PERCENT CHANGE A TO C	PERCENT CHANGE B TO C
	2012 BASELINE	2013 MINI*	2013 FOLLOW-UP		
	A	B	C		
Chickasaw	65.0%	-	68.6%	3.6%	-
DeSoto	79.0%	86.6%	57.2%	-21.8%	-29.4%
Hancock	77.1%	-	79.7%	2.6%	-
Harrison	92.7%	86.0%	93.0%	0.3%	7.0%
Holmes	81.8%	-	71.7%	-10.1%	-
Hinds	72.4%	-	76.7%	4.3%	-
Jackson	92.7%	-	95.7%	3.0%	-
Lee	73.1%	77.6%	71.7%	-1.4%	-5.9%
Leflore	61.7%	69.8%	60.3%	-1.4%	-9.5%
Madison	71.8%	91.5%	81.1%	9.3%	-10.4%
Panola	67.8%	-	54.3%	-13.5%	-
Perry	75.1%	82.5%	85.3%	10.2%	2.8%
Pike	78.3%	83.1%	84.0%	5.7%	0.9%
Pontotoc	68.4%	-	70.8%	2.4%	-
Prentiss	59.8%	-	60.2%	0.4%	-
Rankin	73.9%	82.6%	75.0%	1.1%	-7.6%
TOTAL	74.3%	82.8%	74.4%	0.1%	-8.4%

In 2012, the first survey conducted under the new criteria produced an overall estimate of 74.3% seat belt usage by the motoring public. The results from this trial run of the new survey design supported the presumptions expressed by many before any observations took place. The mere first stage selection of counties was a deflating sign of what was to come. In other words, the state was not blindsided with the results.

In 2013, the new survey design was used as the official statewide estimator of belt usage. As can be seen in Table 11, the overall result of the survey was virtually identical to the trial run in 2012. A 74.4% belt usage estimate brought echoes of disappointment throughout the state. It was, of course, a large step down from the previous year’s belt use estimate of 83.2% provided by the old survey sample. Yet, the

integrity of the sampling design and the results were both validated. Mississippi has either experienced inflated estimations of belt usage in the past, based on the former survey design; or the “luck of the draw,” as some may put it, in the new survey design is not truly representative of the state’s motoring public. Nevertheless, the design is set, for now, and the results most likely push Mississippi back toward the bottom of the belt use ranks among the states. Unfortunately for Mississippi, we have grown accustomed to being at the bottom of the constructive or beneficial lists, and near the top on the disparaging or detrimental ones.

Comparing Baseline 2012 data to Follow-up 2013, DeSoto County is, by far, the utmost surprise with over a 20% decline in observed belt usage. Both Holmes and Panola experienced dramatic declines between these survey periods as well. The counties that counteracted the falls with higher-than-normal observed belt use increases was Madison, Perry and Pike. The positive change in those counties coupled with modest increases in others made the overall belt use estimates the same.

TABLE 12: ROAD CLASS COMPARISONS
SEAT BELT USAGE RATES BY ROAD CLASS * MINI 2013 RESULTS ARE UNWEIGHTED

VEHICLE	PERCENT BELTED			PERCENT CHANGE A TO C	PERCENT CHANGE B TO C
	2012 BASELINE	2013 MINI*	2013 FOLLOW-UP		
	A	B	C		
Interstates & Other Expressways	86.9%	88.9%	85.3%	-1.6%	-3.6%
Other Principal Arterials	79.6%	85.0%	81.8%	2.2%	-3.2%
Minor Arterials	75.9%	81.1%	76.8%	0.9%	-4.3%
Collectors	71.2%	80.0%	71.5%	0.3%	-8.5%
Local Roads	69.8%	70.2%	67.6%	-2.2%	-2.6%

Comparing Mini 2013 data to Follow-up 2013 is intended to gauge the impact of the CIOT campaign from before implementation to after the completion of media and enforcement activities. However, since the Mini survey is a subsample of 54 sites, the comparison is not exactly equitable. The percent change between belt use estimations show many significant decreases over the campaign period, which is not indicative of the results normally experienced. Expected values of estimated belt use are slightly higher post-CIOT. Nevertheless, an 8.4% overall decrease is noted from the Mini 2013 surveyed counties to the Follow-up 2013 surveyed counties.

TABLE 13: VEHICLE TYPE COMPARISONS
SEAT BELT USAGE RATES BY VEHICLE TYPE * MINI 2013 RESULTS ARE UNWEIGHTED

VEHICLE	PERCENT BELTED			PERCENT CHANGE A TO C	PERCENT CHANGE B TO C
	2012 BASELINE	2013 MINI*	2013 FOLLOW-UP		
	A	B	C		
Car/Wagon	77.7%	86.2%	76.4%	-1.3%	-9.8%
Pickup	65.5%	74.5%	68.3%	2.8%	-6.2%
SUV	81.1%	88.8%	80.2%	-0.9%	-8.6%
Van	80.3%	88.6%	80.1%	-0.2%	-8.5%

Comparing before and after belt usage rates by road classification is presented in Table 12. Most of the differences calculated between chronological surveys show negative results. The largest change was a negative change in Collectors (-8.5%) from the 2013 Mini to the 2013 Follow-up. However, most of the difference are slight variations, and the percent change between the two full surveys (2012 Baseline and 2013 Follow-up) suggest the surveys are measuring consistently.

Table 13 illustrates mostly decreasing in belt use estimates over time when considering separate vehicle types. Again, the fluctuation is minor when comparing the full surveys with one another, but the differences are all more than 5% when comparing the 2013 “Mini” to the 2013 Follow-up. These excessive negative percent changes are not expected and are not considered to reflect the impact of the CIOT campaign. The source of the differences could be attributed to the selection of the 54-site Mini subsample.

TABLE 14: BASELINE VERSUS FOLLOW-UP RACE/GENDER COMPARISONS
SEAT BELT USAGE RATES BY RACE AND GENDER
* ALL RESULTS ARE UNWEIGHTED

COUNTY	PERCENT BELTED			PERCENT CHANGE	PERCENT CHANGE
	2012 BASELINE*	2013 MINI*	2013 FOLLOW-UP*		
	A	B	C	A TO C	A TO B
Black Female	75.6%	81.9%	74.6%	-1.0%	-7.3%
Black Male	67.2%	72.6%	67.7%	0.5%	-4.9%
Hispanic Female	80.9%	91.9%	90.5%	9.6%	-1.4%
Hispanic Male	77.4%	90.0%	80.8%	3.4%	-9.2%
White Female	88.0%	91.2%	83.3%	-4.7%	-7.9%
White Male	77.9%	81.5%	75.3%	-2.6%	-6.2%

In Table 14, the comparison of belt use is across race and gender. It can be seen that black occupants of both genders remained belted at almost the same level between the 2012 Baseline and the 2013 Follow-up. White occupants varied five times as much in the same comparison. When comparing the 2013 Mini to 2013 Follow-up, the changes are all substantially negative, save Hispanic females. However, the Hispanic occupants estimated buckle rates for any belt survey cannot be considered accurate due to a low sample size factor. The Hispanic population in Mississippi remains to be a small percentage of the overall, but their numbers may continue to grow and should be considered as an integral part of any future seat belt campaign.



The 2012 Baseline and 2013 Follow-up both use the full survey results from 173 sites in 16 counties. Comparing these full surveys to the 2013 Mini is not an equitable comparison. Therefore, the 54 sites that comprise the 2013 Mini were filtered out of the two other surveys and another comparison was conducted. The results of this comparison by county surveyed can be seen in Table 15.

DeSoto County is obviously a problem area in the 2013 Follow-up survey. It is hoped that low observed belt usage in the 2013 Follow-up estimation for DeSoto was an anomaly and will be rectified in the next iteration of the survey. As a positive note however, most of the comparisons in Table 15 are relatively small. Pike County and Perry County have rather lower estimations in the 2012 Baseline but showed consistency in the latter two surveys. When looking at the overall mini totals, each survey’s respective total estimates were very close and the percent change was low. Perhaps future iterations of the survey will help to ensure there is balance in the chosen sample.

TABLE 15: COUNTY COMPARISONS OF 54 MINI SITES
SEAT BELT USAGE RATES BY COUNTY
* ALL RESULTS ARE UNWEIGHTED

COUNTY	PERCENT BELTED			PERCENT CHANGE	PERCENT CHANGE
	2012 BASELINE	2013 MINI*	2013 FOLLOW-UP		
	A	B	C	A TO C	B TO C
DeSoto	81.5%	86.6%	56.3%	-25.2%	-30.3%
Harrison	93.1%	86.0%	91.6%	-1.5%	5.6%
Lee	78.7%	77.6%	80.9%	2.2%	3.3%
Leflore	64.9%	69.8%	64.2%	-0.7%	-5.6%
Madison	86.6%	91.5%	88.0%	1.4%	-3.5%
Perry	78.6%	82.5%	87.4%	8.8%	4.9%
Pike	69.4%	83.1%	84.7%	15.3%	1.6%
Rankin	83.5%	82.6%	84.8%	1.3%	2.2%
TOTAL	80.8%	82.8%	79.1%	-1.7%	-3.7%

SECTION FOUR:

- United States Census Bureau and American Community Survey. (2008-2012). [Data Table]. Demographic and Housing Estimates. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_5YR_DP05&prodType=table
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SECTION FOUR:

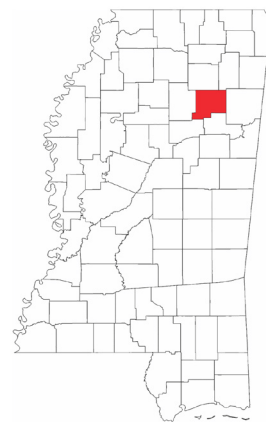
COUNTY ASSESSMENTS

CHICKASAW

68.6% BELT USAGE

Population Estimate: 17,458

 = 9,170
FEMALES
 = 8,288
MALES



FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
3	0	0%	3	100%

DEMOGRAPHICS

% White	55.2%
% Black	41.8%
% Other	3.0%
% Age 15-19	7.1%
% Age: 65+	14.7%
● Road - Miles of Roadway 2010	729
▲ Vehicle - Number of Registered Vehicles 2012	16,655

ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	185	388	238
County	9	11	8
Houston	1	1	1
Okalona	36	23	5

FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
4	0	0%	4	100%

DEMOGRAPHICS

% White	70.9%
% Black	22.3%
% Other	6.8%
% Age 15-19	7.0%
% Age: 65+	11.9%
● Road - Miles of Roadway 2010	867
▲ Vehicle - Number of Registered Vehicles 2012	44,584



ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	73	23	11
County	23	33	13
Bay St. Louis	15	17	5
Waveland	26	55	8

HANCOCK

79.7% BELT USAGE

Population Estimate: 44,044



 = 22,401
FEMALES
 = 21,643
MALES



DESOTO

57.2% BELT USAGE

Population Estimate: 161,536

 = 83,141
*FEMALES
 = 78,395
*MALES



FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
7	4	57%	3	43%

DEMOGRAPHICS

% White	73.4%
% Black	20.2%
% Other	6.4%
% Age 15-19	7.4%
% Age: 65+	10.3%
● Road - Miles of Roadway 2010	1,199
▲ Vehicle - Number of Registered Vehicles 2012	159,070

ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	177	137	83
County	298	560	144
Hernando	220	168	94
Horn Lake	172	214	314
Olive Branch	510	525	833
Southaven	64	116	112

FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
16	7	44%	9	56%

DEMOGRAPHICS

% White	70.9%
% Black	22.3%
% Other	6.8%
% Age 15-19	7.0%
% Age: 65+	11.9%
● Road - Miles of Roadway 2010	1,623
▲ Vehicle - Number of Registered Vehicles 2012	177,775



ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	50	19	19
County	102	58	58
Biloxi	107	251	982
D' Iberville	50	96	556
Gulfport	1,896	1,347	1,259
Long Beach	15	4	2
Pass Christian	3	15	7

HARRISON

93% BELT USAGE

Population Estimate: 188,110

 = 93,344
FEMALES
 = 94,766
MALES




SECTION FOUR:


COUNTY ASSESSMENTS

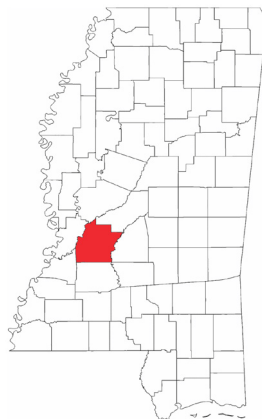
HINDS

76.7% BELT USAGE

Population Estimate: 246,335

 = 130,728
FEMALES

 = 115,607
MALES



FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
21	8	38%	13	62%

DEMOGRAPHICS

% White	28.7%
% Black	69.0%
% Other	2.3%
% Age 15-19	8.2%
% Age: 65+	10.9%
● Road - Miles of Roadway 2010	2,333
▲ Vehicle - Number of Registered Vehicles 2012	189,840

ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	573	53	111
County	979	49	903
Bolton	1	2	2
Clinton	83	136	101
Learned	0	0	0
Raymond	7	12	65
Terry	3	5	2
Utica	8	3	2
Edwards	3	1	3
Jackson	1,082	1,549	1,112

FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
8	2	25%	6	75%

DEMOGRAPHICS

% White	73.3%
% Black	21.6%
% Other	5.1%
% Age 15-19	7.1%
% Age: 65+	12.5%
● Road - Miles of Roadway 2010	1,447
▲ Vehicle - Number of Registered Vehicles 2012	131,856


ENFORCEMENT ■


	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	194	157	107
County	469	308	248
Escatawpa	1	0	1
Gautier	115	257	208
Moss Point	2	1	9
Ocean Springs	84	80	9
Pascagoula	1,216	1,319	929

JACKSON

95.7% BELT USAGE

Population Estimate: 139,430

 = 70,740
FEMALES


 = 68,690
MALES




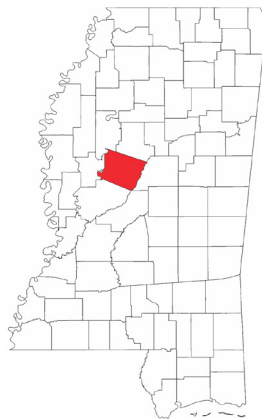
HOLMES

71.7% BELT USAGE

Population Estimate: 19,207

 = 10,157
FEMALES

 = 9,050
MALES



FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
7	2	29%	5	71%

DEMOGRAPHICS

% White	16.0%
% Black	83.5%
% Other	0.5%
% Age 15-19	9.5%
% Age: 65+	12.9%
● Road - Miles of Roadway 2010	1,015
▲ Vehicle - Number of Registered Vehicles 2012	15,315

ENFORCEMENT ■

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	124	67	111
County	75	34	43
Cruger	0	0	0
Durant	16	27	5
Goodman	3	7	0
Lexington	17	35	98
Pickens	14	6	0
Tchula	1	0	0
West	11	4	2

FATALITIES ■

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
14	4	29%	10	71%

DEMOGRAPHICS

% White	69.9%
% Black	27.4%
% Other	2.7%
% Age 15-19	7.1%
% Age: 65+	13.0%
● Road - Miles of Roadway 2010	1,282
▲ Vehicle - Number of Registered Vehicles 2012	75,534


ENFORCEMENT ■


	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	353	348	220
County	31	17	16
Baldwyn	14	29	23
Nettleton	4	11	3
Plantersville	3	12	35
Saltillo	70	122	141
Sherman	48	31	34
Shannon	17	18	0
Tupelo	730	532	329
Verona	24	10	6
Guntown	13	8	9

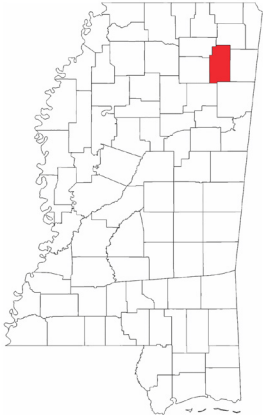
LEE

71.7% BELT USAGE

Population Estimate: 83,235

 = 43,607
FEMALES

 = 39,628
MALES



SECTION FOUR:

COUNTY ASSESSMENTS

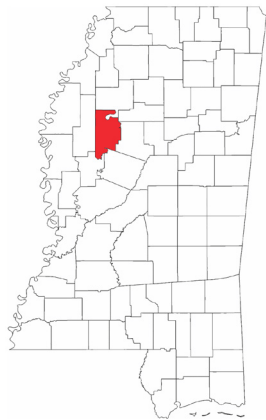
LEFLORE

60.3% BELT USAGE

Population Estimate: 32,196

FEMALES = 16,930

MALES = 15,266



FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
2	1	50%	1	50%

DEMOGRAPHICS

% White	25.9%
% Black	71.6%
% Other	2.5%
% Age 15-19	8.6%
% Age: 65+	11.9%
• Road - Miles of Roadway 2010	906
▲ Vehicle - Number of Registered Vehicles 2012	22,940

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	(2011 Seatbelt Citations
MHP	514	277	73
County	45	177	35
Greenwood	496	1,186	869
Itta Bena	26	21	13
Morgan City	1	0	0
Sidon	0	0	0
Schlater	1	1	0

FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
8	3	38%	5	63%

DEMOGRAPHICS

% White	48.9%
% Black	49.5%
% Other	1.6%
% Age 15-19	7.4%
% Age: 65+	12.9%
• Road - Miles of Roadway 2010	1,193
▲ Vehicle - Number of Registered Vehicles 2012	30,730

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	430	291	164
County	7	26	2
Batesville	36	26	49
Como	0	3	5
Courtland	0	43	1
Crenshaw	1	3	0
Crowder	0	0	0
Pope	1	1	0
Sardis	59	23	48

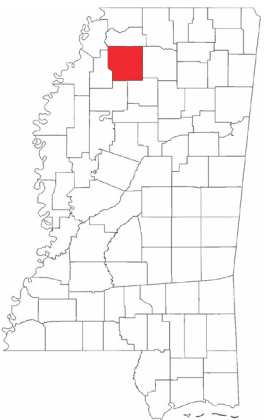
PANOLA

54.3% BELT USAGE

Population Estimate: 34,675

FEMALES = 18,073

MALES = 16,602



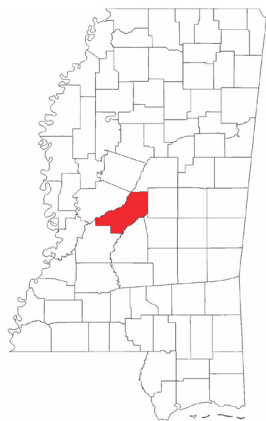
MADISON

81.1% BELT USAGE

Population Estimate: 95,481

FEMALES = 49,725

MALES = 45,756



FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
8	3	38%	5	63%

DEMOGRAPHICS

% White	57.6%
% Black	38.2%
% Other	4.1%
% Age 15-19	7.3%
% Age: 65+	10.7%
• Road - Miles of Roadway 2010	1,307
▲ Vehicle - Number of Registered Vehicles 2012	95,535

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	144	170	82
County	811	562	452
Canton	71	35	108
Flora	8	6	4
Madison	209	157	159
Ridgeland	1249	1263	1244

FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
4	1	25%	3	75%

DEMOGRAPHICS

% White	77.4%
% Black	22.3%
% Other	0.3%
% Age 15-19	7.0%
% Age: 65+	15.1%
• Road - Miles of Roadway 2010	705
▲ Vehicle - Number of Registered Vehicles 2012	13,371

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	14	13	7
County	7	6	5
Beaumont	0	2	1
New Augusta	12	11	9
Richton	4	2	0

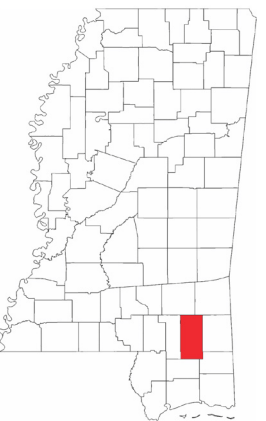
PERRY

85.3% BELT USAGE

Population Estimate: 12,217

FEMALES = 6,252

MALES = 5,965



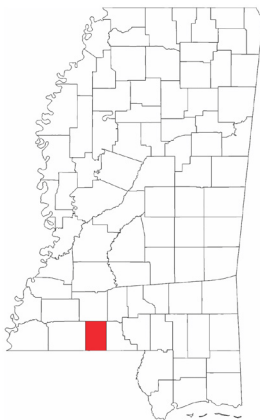
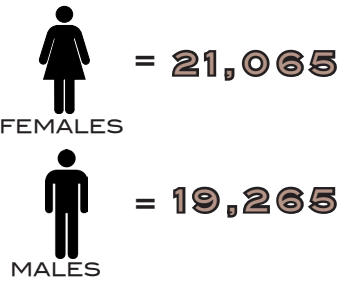
SECTION FOUR:

COUNTY ASSESSMENTS

PIKE

84% BELT USAGE

Population Estimate: 40,300



FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
5	1	20%	4	80%

DEMOGRAPHICS

% White	46.7%
% Black	51.7%
% Other	1.6%
% Age 15-19	7.8%
% Age: 65+	14.2%
• Road - Miles of Roadway 2010	1,005
▲ Vehicle - Number of Registered Vehicles 2012	37,856

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	185	245	175
County	81	111	97
Magnolia	2	1	0
McComb	262	384	282
Osyka	1	4	4
Summit	1	0	0

FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
6	1	17%	5	83%

DEMOGRAPHICS

% White	84.4%
% Black	13.3%
% Other	2.4%
% Age 15-19	7.5%
% Age: 65+	15.8%
• Road - Miles of Roadway 2010	863
▲ Vehicle - Number of Registered Vehicles 2012	22,138

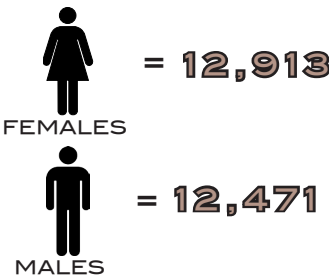
ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	277	195	26
County	19	29	2
Baldwyn	14	29	23
Booneville	163	34	64
Jumperton	0	0	0
Marietta	2	0	0

PRENTISS

60.2% BELT USAGE

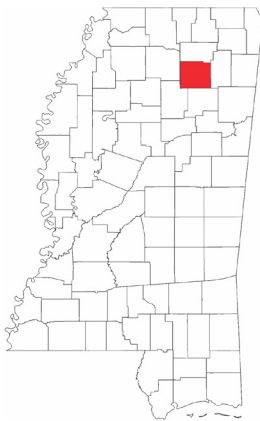
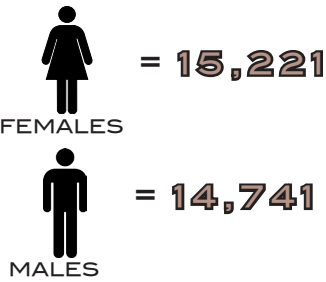
Population Estimate: 25,384



PONTOTOC

70.8% BELT USAGE

Population Estimate: 29,962



FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
3	1	33%	2	67%

DEMOGRAPHICS

% White	80.0%
% Black	14.2%
% Other	5.8%
% Age 15-19	6.9%
% Age: 65+	13.2%
• Road - Miles of Roadway 2010	905
▲ Vehicle - Number of Registered Vehicles 2012	29,313

ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	131	10	0
County	26	3	0
Ecu	0	0	0
Pontotoc	35	53	31
Sherman	48	31	34

FATALITIES

2012 Fatalities	2012 Belted Fatalities	2012 % Belted Fatalities	2012 Unbelted Fatalities	2012 % Unbelted Fatalities
21	5	24%	16	76%

DEMOGRAPHICS

% White	77.9%
% Black	19.0%
% Other	3.1%
% Age 15-19	6.3%
% Age: 65+	11.6%
• Road - Miles of Roadway 2010	1,598
▲ Vehicle - Number of Registered Vehicles 2012	147,578

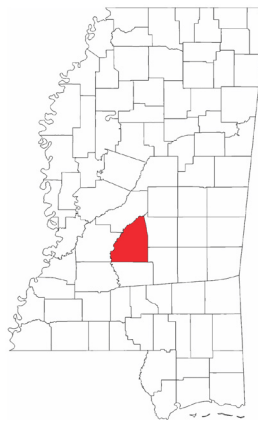
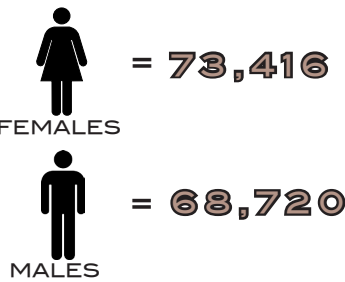
ENFORCEMENT

	2009 Seatbelt Citations	2010 Seatbelt Citations	2011 Seatbelt Citations
MHP	141	31	6
County	85	78	41
Brandon	157	421	317
Florence	164	199	285
Flowood	130	97	268
Jackson	1,082	1,549	1,112
Pearl	1,650	2,338	1,581
Pelahatchie	2	3	0
Richland	25	28	13
Puckett	15	44	76

RANKIN

75% BELT USAGE

Population Estimate: 142,136



SECTION FIVE: MOTORCYCLE HELMET USE

The final segment of this survey is motorcycle helmet use in Mississippi. Mississippi is fortunate to have an excellent motorcycle helmet law. It is a primary law. All motorcycle riders must wear helmets or receive a ticket. As a part of the post-campaign seat belt survey, motorcycle helmet use is also observed during the same time periods and at the same locations as vehicle occupants. There were 272 motorcycle riders observed in 2013, with 239 drivers and 33 passengers.

Motorcycle helmet use has shown up and down estimated use rates in the United States from 2010 to 2012. Helmet use increased from 54% in 2010 to 66% in 2011 and then back down to 60% in 2012.⁶ Mississippi, however, has maintained a consistently high percentage of helmet use. Over the past several years, Mississippi’s observed motorcycle helmet use has been in the upper 90% range. Once again, the overall observed helmet use for Mississippi in 2013 is 98.5%.

⁶ NHTSA Traffic Safety Fact – Motorcycle Use in 2012 – Overall Results (DOT HS 811 759)

Table 16 provides a breakdown of 2013 helmet use in Mississippi by gender and race. Notice passenger helmet use is 100% which is expected behavior. White males and females are the only categories that shows any noncompliance with the helmet law. Note there was no attempt in the survey to judge whether the helmet was legal or illegal.

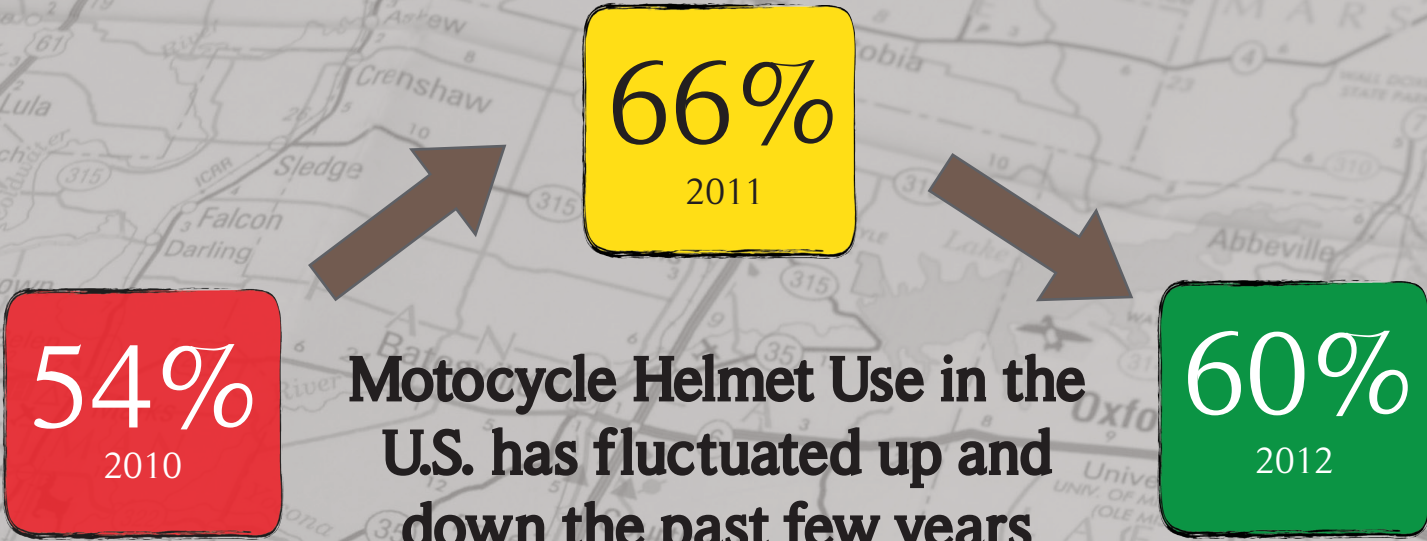


MOTORCYCLE HELMET USE FOR MISSISSIPPI IN 2013 IS 98.5%

TABLE 16: UNWEIGHTED MOTORCYCLE HELMET USAGE IN MISSISSIPPI
FULL SURVEY OF 173 SITES IN 16 COUNTIES

MOTORCYCLE RIDERS	NUMBER OF DRIVERS	HELMETED DRIVERS	PERCENT HELMETED DRIVERS	NUMBER OF PASSENGERS	HELMETED PASSENGERS	PERCENT HELMETED PASSENGERS
Black Males	19	19	100.0%	0	0	-
Black Females	1	1	100.0%	1	1	100.0%
White Males	203	201	99.0%	3	3	100.0%
White Females	15	13	86.7%	28	28	100.0%
Hispanic Males	1	1	100.0%	0	0	-
Hispanic Females	0	0	1	1	1	100.0%
TOTAL	239	235	98.3%	33	33	100.0%

DID YOU KNOW?



98.5% Overall observed helmet use in Mississippi for 2013

Passenger helmet use is 100%

Mississippi has maintained a consistently high percentage of helmet use.

SUMMARY

For over a decade, intense media and enforcement campaigns have been directed towards Mississippians with the intent of increasing their awareness of seat belt laws, promoting highway safety, and changing the behavior of those who do not buckle their belts. The Click It or Ticket (CIOT) campaign is conducted over a four week period of earned media, paid media, and enforcement. This awareness and enforcement effort is part of the Memorial Day mobilization. The effectiveness of these efforts was evaluated by surveys managed by the Social Science Research Center at Mississippi State University.

In 2013, the newly designed and NHTSA approved survey design was used to estimate belt use rates for Mississippi. The full survey, which includes 173 observation sites in 16 counties, was used to estimate the belt use rate of Mississippi motorists after the CIOT campaign in early June. The overall estimate from the full survey is considered the official belt use rate for Mississippi in 2013. Prior to CIOT, a subsample, or Mini, survey was administered to establish a baseline belt use rate. The “Mini” survey consisted of 54 sites in eight counties. The baseline was conducted in April and early May.

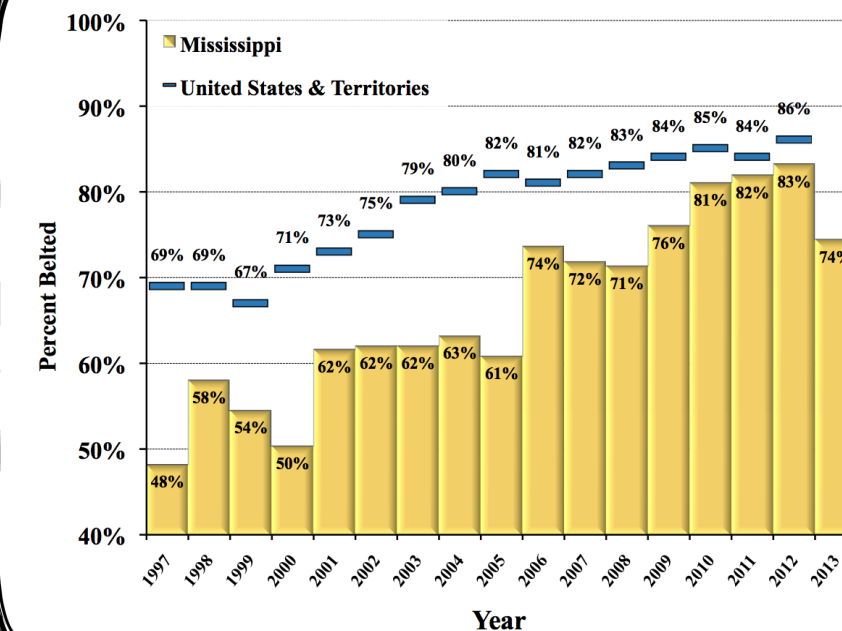
Overall, the baseline information indicated an 82.8% belt use rate, and when compared to the 74.4% estimate in the post campaign survey, Mississippi did not show a favorable change in belt use over the campaign period. In fact, the 74.4% belt use estimate for the state is down 8.8% from the official 83.2% belt use rate reported in 2012 using the old survey design. Mississippi’s climb in belt use over the past few years to over the 80% mark and approaching the national average has taken a significant step backwards.

The drop, and the magnitude of the drop, in estimated seat belt usage is not considered a reflection of a failed CIOT campaign. Media and enforcement efforts in 2013 were most likely successful, although other measures of the program’s success are not in the scope of this report. The fact is that there is currently not enough data to support any definitive cause for the reduction in observed statewide belt use. The most likely contributing factor is the change of the survey design. The new measurement “yardstick” is either much more or much less representative of the actual belt use rate in Mississippi. If the estimate is much less representative, the behavioral tendencies of Mississippi’s vehicle occupants with regard to buckling up is, and will continue to be, incorrectly portrayed to NHTSA and the rest of the nation. If the estimate is much more representative, the old survey design was producing inflated figures for several years and the state can expect to see annual belt use estimates in the mid to upper 70% range for the foreseeable future.

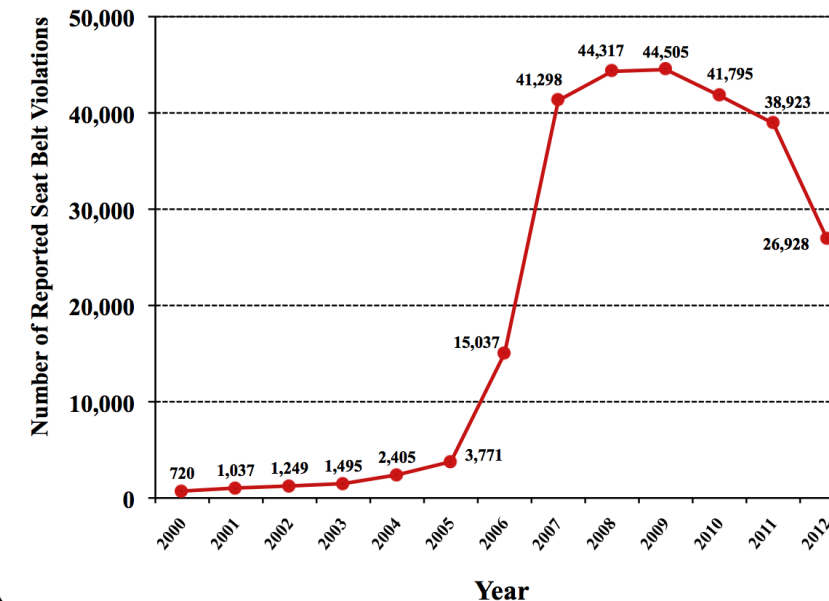
Finally, as is evident by the survey results, Mississippi has an excellent usage rate for motorcycle helmet usage. For a number of years, the helmet use rate has been near 100%.

MISSISSIPPI SEAT BELT USAGE RATES & BELT VIOLATION CITATIONS

The figures below show a bar graph depicting Mississippi’s seat belt usage rates over the past 17 years. From a dismal rate of 48 percent in 1997 to this year’s level of 74 percent, the upward trend over this time is apparent.



The top figure on this page shows the estimated seat belt use rates in Mississippi compared to the estimated national average belt usage rates each year for the past 17 years. The national average for 2013 is not known at the time of this report. The graph shows only about 1 out of every 2 Mississippi motorists buckling up in the late 1990’s. From 2001 to 2005, a relatively flat belt use rate in the lower 60 percent range was exhibited by the state. It wasn’t until 2006 when Mississippi enacted a primary seat belt law that provided the catalyst for over a 10 percentage point increase in belt use. More importantly, the trend lines between the national average and Mississippi’s estimated belt use rate have been on a collision course up to 2011. Unfortunately, Mississippi’s significant drop in observed belt use for 2013 has surely widened that gap once again.



The bottom figure illustrates the number of seat belt citations issued to the motoring public since the year 2000. Beginning in 2006 the number of seat belt citations distributed rose dramatically. From 2007 to 2010 the number of violations issued for non-compliance of the state’s seat belt law is shown to surpass 40,000 citations per year. However, from 2009 to 2012, a sharp downward trend can be seen.



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